

RCMProfile

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Resource Conservation Manager: A Successful Approach in the Northwest

Lori Moen, RCM Kent School District



Lori Moen in her office in Kent, Washington.

Photo courtesy of the Kent School District.

For a resource conservation manager, success is when the school district superintendent testifies publicly about the benefits of energy efficiency.

At Kent School District in Western Washington, Superintendent Barbara Grohe says RCM Lori Moen gives her something to brag about at budget hearings. Conservation efforts net the district about \$400,000 a year in documented savings.

"Lori's very good at numbers," says Grohe. "She really can back it up, and I think that's critical."

The Kent School District is the fourth largest in the state with some 26,000 students and more than 3,000 employees. Last

school year, the district spent \$3.6 million on utilities, with electricity accounting for more than 60 percent of the cost.

Spreadsheets and flowcharts decorate Moen's small office in the district's maintenance building. Her Resource Conservation Program website is sprinkled with more numbers than a physics professor's whiteboard. She knows to the penny how much the district spends for electricity, natural gas, water and garbage disposal at its 40 schools, plus portables and administrative buildings.

"I'm just kind of a cheerleader and a bean counter," says Moen, a former utility-company employee, who went to work for the Kent School District in 1996.

Since then, per occupant energy use has dropped more than 12 percent. That means that, as the district grows, so do the savings. In

comparisons with other schools in the state and nationwide, Kent's are almost always at or near the top for energy efficiency.

Cutting back on kilowatts depends on convincing everyone to do their part. Moen has developed a seven-page packet of Energy and Resource Use Guidelines covering heating and ventilation, interior and exterior lighting, plug loads, water use, solid waste and recycling. She plans to post a one-page summary at each school.

But a significant portion of the savings comes from empty buildings. Moen walks through with her camera during school vacations and holidays looking for equipment that's still running due to control malfunctions or human error. She also tries to coordinate after-hours building use. Keeping the community out isn't the goal, she says. "I encourage smart use of our buildings."

Moen has a part-time assistant, but she depends on help from the district's maintenance staff. When she can't leave her desk, she can call a custodian to check the electric meter at a school. On a September afternoon, a uniformed maintenance man stops by Moen's office to update her on an equipment problem. "That's not uncommon," she says.

Utility billing errors are a jackpot of additional savings. The

first evidence of a leak is often the water bill. Sometimes the utility forgets to credit the district for cancelled trash and recycling pick-ups during the holidays. Or a simple typo turns a meter reading from 72 kilowatts to 720 kilowatts – a zero worth \$3,000.

"It's kind of like an Easter egg hunt," says Moen, who has identified a third of a million dollars in utility billing errors since she came to the district.

Tougher to crack are savings tied to the idiosyncrasies of human behavior and comfort.

"I'm just kind of a cheerleader and a bean counter."

*Lori Moen,
Kent School District*



Illustration courtesy of Kent School District.

Temperature standards are important because lowering thermostats just one degree results in a three percent savings on the heating bill, says Moen. At Kent schools, heating controls are set at 69 degrees for classrooms and 65 degrees for hallways and common areas. Building occupants are allowed to temporarily change the temperature setting by up to three degrees.

"You shouldn't expect people to be uncomfortable," says Moen, who keeps a gray sweater on the

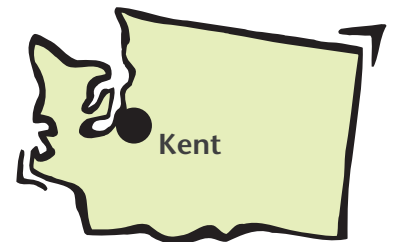
back of her office chair. "If you ask reasonable things you should expect people to participate."

Puget Sound Energy is an ally in the district's conservation efforts. Moen plans to take advantage of the utility's rebate program to install programmable thermostats in most of the district's 150 portables. Under a recent agreement, she will help each school adopt resource-saving guidelines and create a facility action plan. In exchange, the utility will provide startup funds and incentives, and guarantee energy savings worth up to \$200,000 over three years.

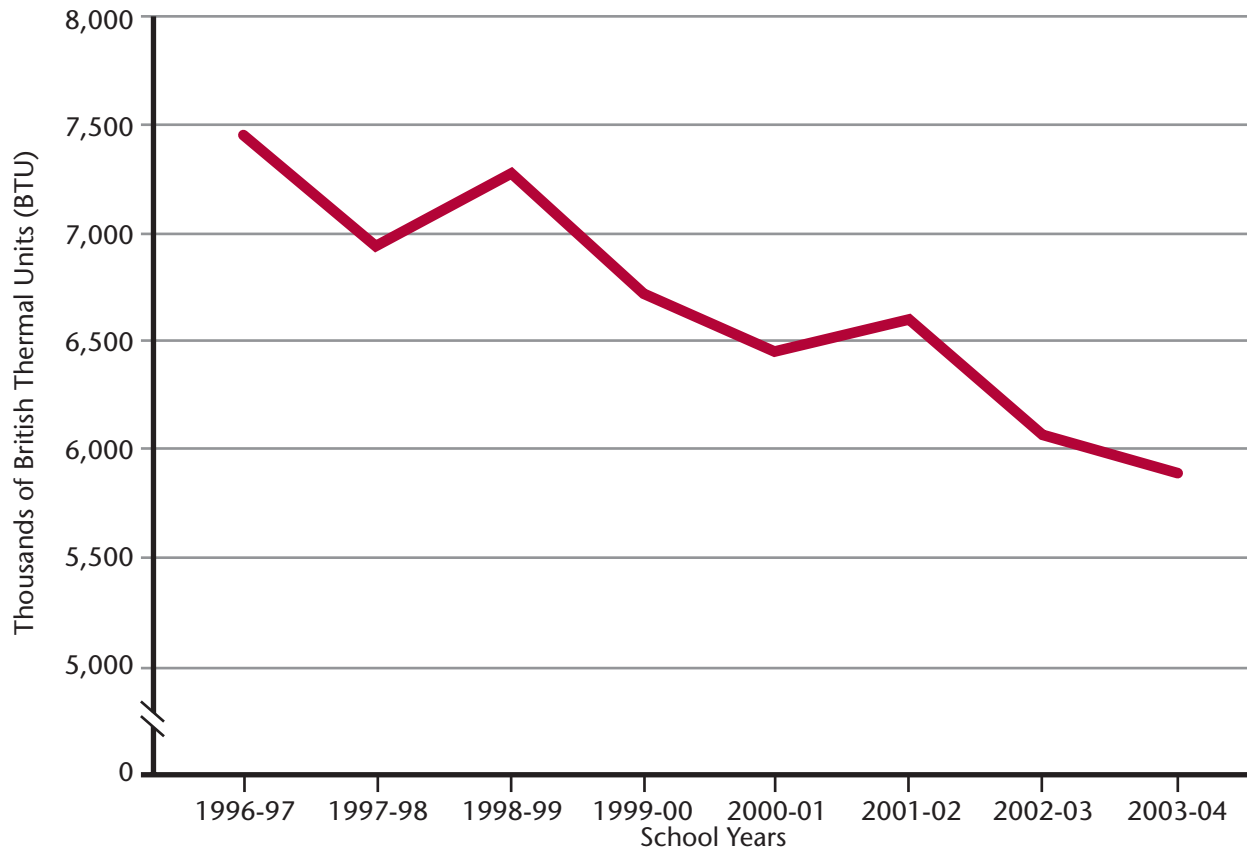
"I'm so excited about this," says Moen. "It's just a closer partnership – formalizing a relationship that already existed."

That relationship has helped the district secure hundreds of thousands in grants for energy-efficient construction. Moen recently convinced the district to install a ground source heat pump instead of a more traditional heating system in an addition at Kentwood

High School. "It penciled out," says Moen, who projects a payback of less than 10 years.



Kent School District: Energy Use Per Person



Everyone favors sustainable building practices, in theory. But in reality, the district is on a tight construction schedule that leaves little time for tweaking cookie-cutter designs, says Moen. “To say, ‘Stop, let’s think holistically about this,’ is very difficult.”

Kids are an easier audience. One of Moen’s favorite parts of the job is visiting schools and helping teachers with recycling programs, like the one at Crestwood Elementary. The school set up a composter for lunch leftovers called The Big Pig, or bEARTHa. Moen bought the students a piggy bank to symbolize the savings. bEARTHa sent her a coffee card for Christmas.

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*Superintendent
Barbara Grohe,
Kent School District*

Word of the district’s success has gotten around. Moen offers ideas and materials through her program website and frequently gets calls and e-mail from people interested in resource conservation and accounting. In December, the Kent School District was among eight

recipients of the 2004 Governor’s Awards for Excellence in Energy Management.

“I value and deeply appreciate your hard work, your leadership and your long-term commitment to greater efficiency, economic savings, and environmental stewardship,” then Gov. Gary Locke told winners at an awards ceremony.

The private sector understands the value of conservation, too. Since coming to the Kent School District, Moen has turned down job offers from two large West Coast retailers. When another school district offered her a job last spring, the superintendent personally asked

her to stay.

Says Superintendent Grohe, “What she offered us in terms of being able to influence people to live their lives in a different way was an important part of what we were trying to teach.”

For more information about resource conservation management see:

- The Kent School District’s Resource Conservation Program website at www.kent.k12.wa.us/KSD/FP/CO
- The Washington State University Extension Energy Program website at www.energy.wsu.edu/projects/rem/rcm.cfm
- The Oregon Department of Energy’s website at www.energy.state.or.us/rcm/rcmhm.htm



In 2004, on behalf of the Kent School District, Lori Moen accepted an energy conservation award – the Governor’s Award for Excellence in Energy Management – from then Washington Governor Gary Locke.

Photo by Jim Erskine, Washington State Department of General Administration.

- This publication is available online through the Washington State University Energy Program at www.energy.wsu.edu/projects/rem/rcm.cfm
- For further information about Resource Efficiency Manager support, contact Karen Messmer, messmerk@energy.wsu.edu, at (360) 956-2090.



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